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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/539,700	06/16/2005	Scott E Hall	US020550	6576
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EXAMINER				
CHIN, RANDALL E				
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/539,700

Applicant(s)

HALL, SCOTT E

Examiner

Randall Chin

Art Unit

3723

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 March 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☒ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/CD)
Paper No(s)/Mail Date 02082010
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-9 are rejected under 35 U.S.C. 102(b) as being anticipated by Peot 4,777,393 (hereinafter Peot).

At the outset, it should be noted that the preamble of claim 1 merely recites "A system **for joining an appliance body having a driving assembly therein to a driven member assembly which includes a workpiece element having a torsional axis of movement**" (emphasis added) and that the bolded recitations are not being positively set forth in claim 1. Accordingly, claim 1 is **only** simply claiming "A system for joining", which Peot clearly discloses, and the other elements such as the "driving assembly", "a driven member assembly", "an appliance body", "a workpiece element", etc. **are all not positively claimed**. Thus, no significant patentable weight is attributed to these such elements nor any related functional effects of such elements given the present preamble language. If Applicant intended to positively claim these elements, then the preamble should have been written differently. Furthermore, if Applicant intended to positively claim these elements, then the body of the claim is inconsistent

with that set forth by the preamble language rendering the scope of the claim and those claims dependent thereon vague and indefinite.

As well as claim 1 is understood, the patent to Peot discloses in Figs. 1, 4, 16 and 17, for example, a system for joining an appliance body having a driving assembly therein to a driven member assembly which includes a workpiece element having a torsional axis of movement, comprising a plurality of joining assemblies removably attaching the driven member assembly to the appliance body, wherein the joining assemblies are each separate from the torsional axis of the workpiece element, wherein the joining assemblies each include a mating member on one of a) the appliance body and b) the driven member assembly at locking pin members 58, 58, 58 (Fig. 16) and an associated receiving element on the other thereof (not shown but disclosed at col. 7, lines 38-47 and col. 9, lines 2-5), wherein the mating members and the receiving elements have such a configuration, respectively, and mate in such a manner that there is **"substantially no lost motion"** ("substantially" here renders the phrase rather broad) for the workpiece element during operation of the appliance and such that the driven member assembly is readily removable, if so desired, from the appliance body "upon application of an axial force", and wherein the mating of the mating members and the receiving members is an "interference fit" in (in the sense that there is still physical holding friction/contact between the mating members and the receiving members).

As for the quoted phrase "upon application of an axial force", such phrase is merely functional and is still deemed met by Peot. Also, the phrase "such that the driven member assembly is readily removable from the appliance body" is functional and

deemed merely relative. Further, no **adequate or specific structure** has been set forth in claim 1 to define any standard as to whether the rather broad phrase "substantially no lost motion" is met or not met. Note, "*substantially* no lost motion" is that much broader. There has been no **adequate or specific structure** (e.g., for the joining assemblies) recited in claim 1 to carry out the alleged intended function of there being "substantially no lost motion" for the workpiece element. In other words, what **specific structure** has been recited in claim 1 to structurally distinguish it from the **mating structure** of Peot to perform the alleged intended function of there being "substantially no lost motion" for the workpiece element. Given the present claim language recited by claim 1, Peot is deemed to perform similarly as Applicant's own invention.

As for claim 2, in Peot, the configuration of the mating members and receiving elements is such that compression forces sufficient to maintain contact therebetween are deemed always present during torque action of a drive shaft on which the workpiece is mounted.

As for claim 3, Peot teaches three spaced joining assemblies 58, 58, 58 (Fig. 16) located around the periphery of the interface between the appliance body and the driven member assembly.

As for claim 4, the mating member of each joining assembly has a non-circular cross-section (at least in side view) and the associated receiving element has a similar non-circular cross-section (also in side view), such that the receiving element and the mating member are capable of mating together.

As for claim 5, the appliance body and the driven member assembly, respectively, include a handle portion and a head portion "of an oral care appliance" (not positively recited nor is there any structure positively recited to set forth such "oral care appliance").

As for claim 6 reciting that the oral care appliance is a power toothbrush, as stated above, claim 1 is merely reciting "[A] system for joining..." and does not positively recite the oral care appliance.

As for claim 7, there are registration elements 50, 52, 134, 136 on the appliance body which mate with the driven member assembly (col. 11, lines 12-14; Figs. 3 and 17), the registration elements producing a proper orientation between the appliance body and the driven member assembly as the appliance body is joined to the driven member assembly.

As for claim 8, the "mating member" (a broad phrase) extends from the appliance body and the receiving element is in the driven member assembly (Figs. 16 and 17).

As for claim 9, the mating members comprise spaced blade elements in the appliance body and the receiving elements comprise spring assemblies which clamp onto the blade elements with a compression force (col. 7, lines 44-47).

3. Claims 10-16 are rejected under 35 U.S.C. 102(b) as being anticipated by McDougall 5,617,601 (hereinafter McDougall).

As for claim 10, the patent to McDougall discloses in Figs. 9 and 10 an oral care appliance 502, comprising an appliance body 506 having a driving assembly therein, a driven member assembly 508 which includes a workpiece element having a torsional axis of movement and wherein the workpiece element includes a brushhead 100 (Fig. 9A), and a coupling structure (Figs. 9B and 10) for joining the appliance body 506 to the driven member assembly 508, the coupling structure including a plurality of joining assemblies removably attaching the driven member assembly 508 to the appliance body 506, wherein the joining assemblies are each separate from the torsional axis of the workpiece element, wherein each joining assembly includes a mating member 513 from one of a) the appliance body or b) the driven member assembly and an associated receiving element 515 in the other thereof, receiving said mating member, wherein the mating members and the receiving elements have such a configuration, respectively, and mate in such a manner that there is "**substantially** no lost motion" ("substantially" here renders the phrase rather broad) for the workpiece element during operation of the appliance, and such that the driven member assembly is readily removable from the appliance body "upon application of an axial force" (col. 5, lines 26-29), and wherein the mating of the mating members 513, 513 and the receiving elements 515, 515 is a push-fit or interference fit (col. 4, lines 55-64; Fig. 10).

Thus, McDougall meets all of the **structural** limitations of claim 10. Applicant should note that the entire phrase appearing on lines 12-15 of claim 10 reciting "...in such a manner that there is substantially no lost motion for the workpiece element during operation of the appliance, and such that the driven member assembly is readily

removable from the appliance body upon application of an axial force" is entirely **functional** in form and still deemed met by McDougall. With such broad terms (see in bold) used in the claim, such as "**substantially** no lost motion" and "**readily** removable from the appliance body", and moreover, appearing merely in a functional recitation, such broad phrases (or for that matter, the entire functional phrase on lines 12-15) do/does not define over that taught by McDougall. Moreover, no **adequate or specific structure** has been set forth in claim 10 to define any standard as to whether the rather broad phrase "substantially no lost motion" is met or not met. Note, "*substantially* no lost motion" is that much broader of a recitation. There has been no **adequate or specific structure** (e.g., for the joining assemblies) recited in claim 10 to carry out the alleged intended function of there being "substantially no lost motion" for the workpiece element. **In other words, what specific structure has been recited in claim 10 to structurally distinguish it from the mating structure of McDougall to perform the alleged intended function of there being "substantially no lost motion" for the workpiece element.**

As for claim 11, there are three spaced joining assemblies arranged around the periphery of the interface between the appliance body and the driven member assembly if joining assembly 512, 518 is included (Fig. 10).

As for claim 12, the mating member 513 of each joining assembly has a non-circular cross-section and the associated receiving element 515 has a similar non-circular cross-section, such that the receiving element and the mating member are capable of mating together (Fig. 10).

As for claim 13, the mating member 513 extends from the appliance body and the receiving element 515 is in the driven member assembly.

As for claim 14, the mating members also include spaced blade elements in the appliance body at grooves/shoulders 510/511 and the receiving elements comprise spring assemblies defined by legs 516 which clamp onto the blade elements with a compressive force (col. 5, lines 17-25).

As for claim 15, McDougall teaches in Figs. 9 and 10 a brushhead-handle assembly of a power toothbrush in which a brushhead is joinable to and removable from a handle portion of the toothbrush by a plurality of joining assemblies, the joining assemblies being separate from a torsional axis of movement of a brushhead workpiece portion 508 of the brushhead assembly 100, comprising a brushhead assembly which includes a brushhead workpiece element, wherein the brushhead assembly includes a plurality of joining members 515 which mate with associated second joining members in "the handle portion" (not positively recited) to form joining assemblies, wherein the first joining members 515 have such a configuration, relative to the configuration of the associated second joining members and mate therewith in such a manner that there is "substantially no lost motion" ("substantially" here renders the phrase rather broad) of the workpiece element during operation of the toothbrush and such that the brushhead assembly is readily removable from the handle portion of the toothbrush "upon application of an axial force", and wherein the mating of the mating members 513, 513 and the receiving elements 515, 515 is a push-fit or interference fit (col. 4, lines 55-64;

Fig. 10). Also, note also, the recitation that there is an interference fit here between the mating members and the receiving elements is not exclusive.

Thus, McDougall meets all of the **structural** limitations of claim 15. Applicant should note that the entire phrase appearing on lines 11-15 of claim 15 reciting "...in such a manner that there is substantially no lost motion for the workpiece element during operation of the appliance, and such that the driven member assembly is readily removable from the appliance body upon application of an axial force" is entirely **functional** in form and still deemed met by McDougall. With such broad terms (see in bold) used in the claim, such as "**substantially** no lost motion" and "**readily** removable from the appliance body", and moreover, appearing merely in a functional recitation, such broad phrases (or for that matter, the entire functional phrase on lines 11-15) do/does not define over that taught by McDougall. Moreover, no **adequate or specific structure** has been set forth in claim 15 to define any standard as to whether the rather broad phrase "substantially no lost motion" is met or not met. Note, "*substantially* no lost motion" is that much broader of a recitation. There has been no **adequate or specific structure** (e.g., for the joining assemblies) recited in claim 15 to carry out the alleged intended function of there being "substantially no lost motion" for the workpiece element. In other words, what specific structure has been recited in claim 15 to structurally distinguish it from the mating structure of McDougall to perform the alleged intended function of there being "substantially no lost motion" for the workpiece element.

As for claim 16, in McDougall, the configuration of the first joining member and the second joining members are such that compression forces sufficient to maintain contact therebetween are deemed always present during torque action of a drive shaft on which the workpiece portion is mounted.

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The Japan '574 reference is pertinent to a device with a lost motion arrangement.

5. Applicant's arguments filed 01 March 2010 have been fully considered but they are not persuasive.

Applicant's arguments pertaining to Peot and McDougall are deemed adequately addressed by the above art rejections. Additionally, the Examiner's position is deemed adequately set forth as explained by the above rejections.

It will be added that with respect to Peot, Applicant's attention is again drawn to the present language used in the preamble of claim 1. Accordingly, "the driven member assembly" and "the appliance body" are not being positively claimed in claim 1. Applicant's remarks pertaining to an "interference fit" are noted, however, given the broader interpretation of such phrase by contact friction, Peot has been maintained. Notwithstanding, a mere joining system that provides an "interference fit" between two members is not patentable.

As for McDougall, it will be added that a "push fit" is equated to an "interference fit" as set forth above (see also col. 4, lines 55-64; Fig. 10). Also, the fact that there may be some rotation applied in McDougall after a push-fit or interference fit is **not precluded by the claim**. In other words, the claims do not recite that the mating of the mating members and the receiving elements is **solely** by interference fit (and which would probably even constitute new matter).

For all of the above reasons, the rejections of claims 1-16 are still deemed proper.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Randall Chin whose telephone number is (571) 272-

1270. The examiner can normally be reached on Monday through Thursday and every other Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Hail can be reached on (571) 272-4485. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Randall Chin/
Primary Examiner, Art Unit 3723

